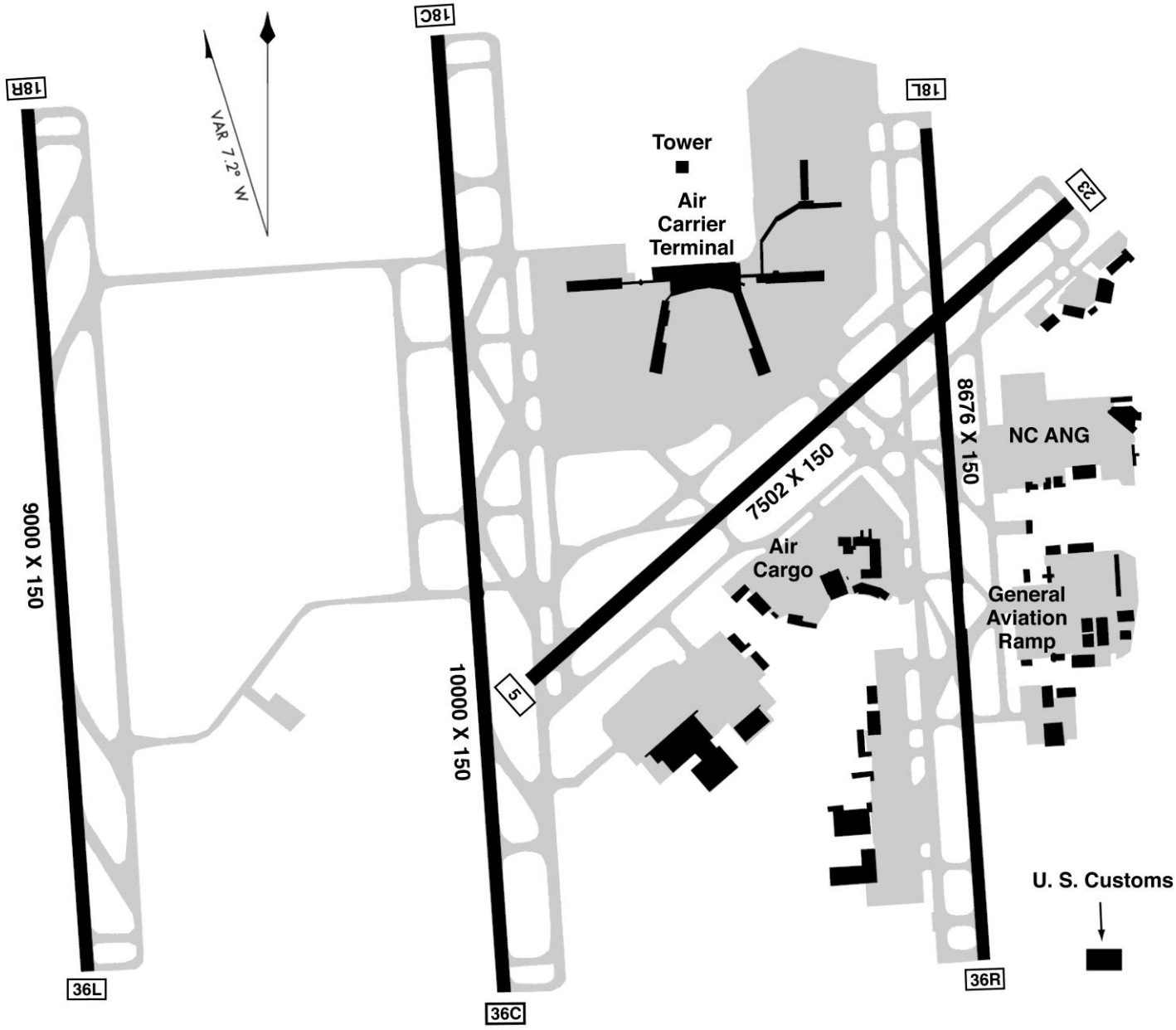
CLT

CHARLOTTE/DOUGLAS INTERNATIONAL



Airport capacity profile estimates were created using a standard set of performance characteristics and do not take into account non-runway constraints, unless otherwise noted. The capacity estimates developed for this report are not intended to replace the results of any detailed analysis that would precede an environmental, investment, or policy decision.

The list of Future Improvements and their expected effects on capacity does not imply FAA commitment to, or approval of, any item on the list.

CLT CHARLOTTE/DOUGLAS INTERNATIONAL

DEFINITION

- The capacity profile shows the hourly throughput that an airport is able to sustain during periods of high demand, represented as the range between the model-estimated capacity and the ATC facility reported rate (called rate). Each weather condition has a unique capacity rate range.
- The following charts compare actual hourly traffic with the estimated capacity curves for CLT.

RECENT CAPACITY IMPROVEMENTS AT CLT

- In 2010 CLT commissioned a new runway, 18R/36L, which is primarily used for arrivals.
- Implementation of Traffic Management Advisor (TMA) helps to improve the flow of arrivals to the runways.

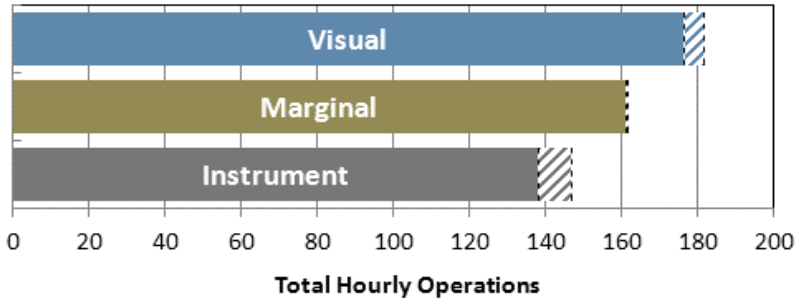
FUTURE IMPROVEMENTS AT CLT

- *Same Runway Departure Fanning* is anticipated to be available at CLT. If approved, this could allow reduced separation between successive departures due to the availability of new Standard Instrument Departure (SID) procedures which provide more precise guidance and control for departing aircraft.
- *Improved Runway Delivery Accuracy:* The combined effects of several new capabilities, including ADS-B Out, CDTI, and TBM in the terminal area, will improve the ability of controllers by 2020 to deliver aircraft to the runway with the desired separation from the preceding aircraft. This will reduce the average spacing between arrivals and boost arrival capacity.
- Additional information on these improvements may be found in this report under “Future Operation Assumptions."

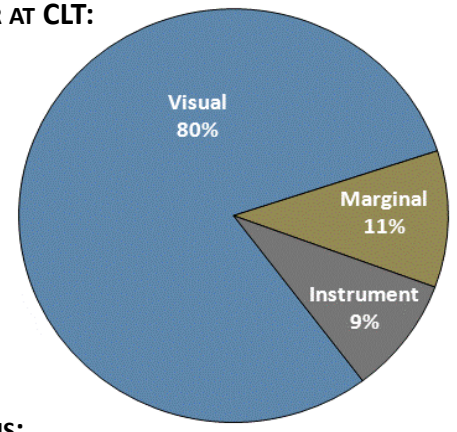
DATA SOURCES

- Actual hourly CLT operations, weather and configuration data were obtained from the FAA ASPM database, and represent operational hours from 7am to 11pm local time for all of Fiscal Years 2009 and 2010. Actual configuration usage is determined by multiple operational factors, including weather conditions.
- Facility reported rates were provided by ATC personnel at CLT.
- Model-estimated rates are derived from operational information provided by ATC.

CURRENT OPERATIONS CAPACITY RATE RANGE



ANNUAL WEATHER AT CLT:



VISUAL CONDITIONS:

- Ceiling and visibility allow for visual approaches: at least 3600 feet ceiling and 5 miles visibility

MARGINAL CONDITIONS:

- Ceiling and visibility below visual approach minima but better than Instrument conditions

INSTRUMENT CONDITIONS:

- Ceiling and visibility below 1000 feet ceiling or 3 miles visibility

VISUAL

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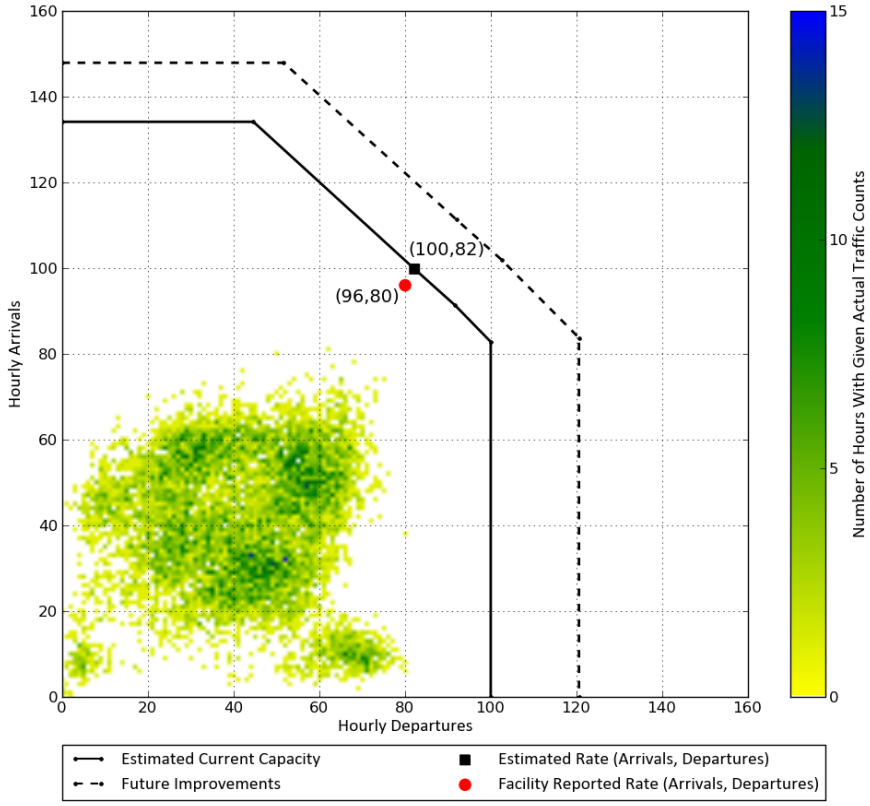
CLT Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	18C, 18R, 23	18C, 18L	Converging Instrument Approaches, Visual Separation	176	182
FUTURE IMPROVEMENTS Same Runway Departure Fanning Improved Runway Delivery Accuracy	18C, 18R, 23	18C, 18L		N/A	203

VISUAL WEATHER CONDITIONS



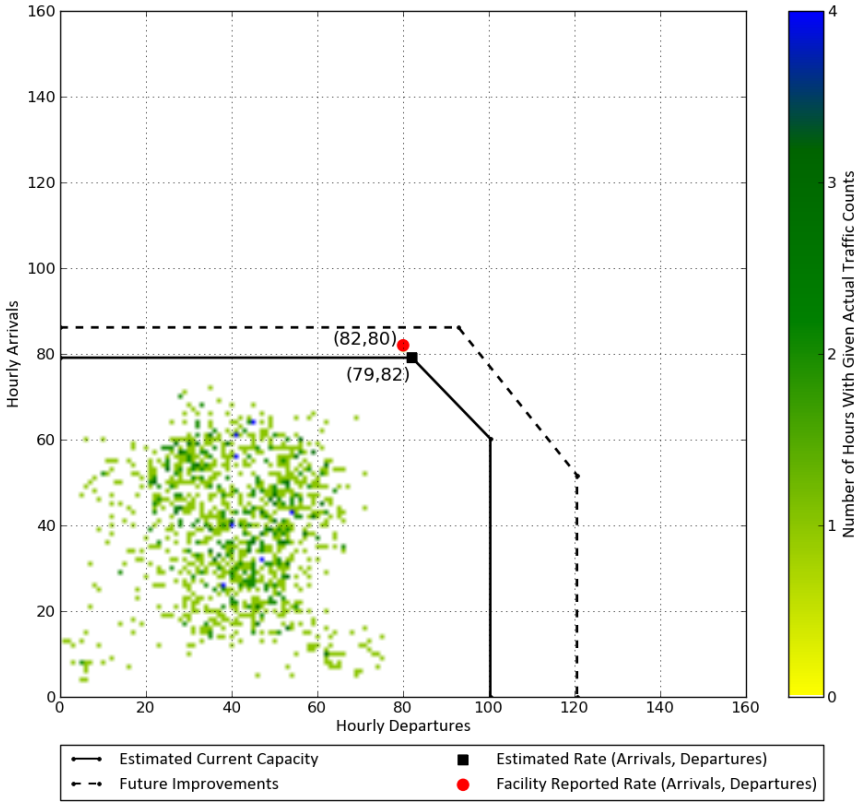
- The capacity rate range in Visual conditions is currently 176-182 operations per hour.
- CLT has two primary directional traffic flows. The airport operates in variations of this configuration approximately 51% of the time in Visual weather conditions (totaling 41% annually).
- The new runway was certified for use in Visual weather on January 2, 2010. The percentages cited above include hours prior to the opening of the new runway. For the period prior to opening, only Runways 18C and 23 were used for arrivals.

MARGINAL

CHARLOTTE/DOUGLAS INTERNATIONAL

CLT Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	18R, 23	18C, 18L	Converging Instrument Approaches, Visual Separation	162	161
FUTURE IMPROVEMENTS Same Runway Departure Fanning Improved Runway Delivery Accuracy	18R, 23	18C, 18L		N/A	179

MARGINAL WEATHER CONDITIONS



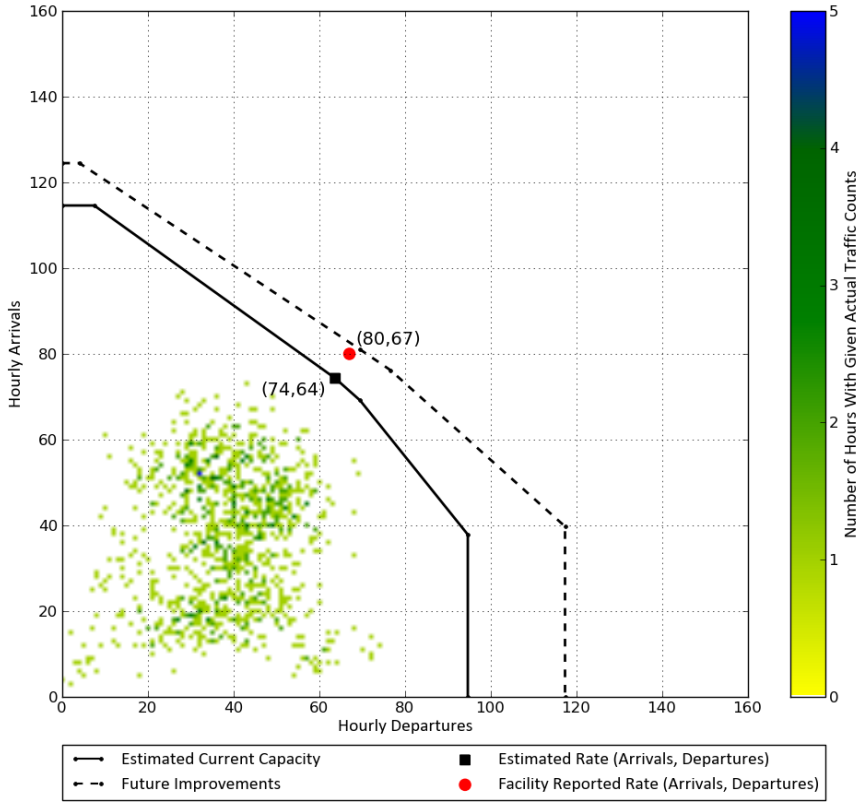
- The capacity rate range in Marginal conditions is currently 161-162 operations per hour.
- CLT has two primary directional traffic flows. The airport operates in variations of this configuration approximately 39% of the time in Marginal weather conditions (totaling 4% annually).
- The new runway was certified for instrument approaches on February 11, 2010. The percentages cited above include hours prior to the opening of the new runway. For the period prior to opening, only Runways 18C and 23 were used for arrivals.
- Reduced separation (2.5 NM) between arrivals is authorized for instrument approaches to all runways at CLT.

INSTRUMENT

CHARLOTTE/DOUGLAS INTERNATIONAL

CLT Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	36C, 36L, 36R	36C, 36R	Triple Simultaneous Instrument Approaches, Radar Separation	147	138
FUTURE IMPROVEMENTS Same Runway Departure Fanning Improved Runway Delivery Accuracy	36C, 36L, 36R	36C, 36R		N/A	150

INSTRUMENT WEATHER CONDITIONS



- The capacity rate range in Instrument conditions is currently 138-147 operations per hour.
- CLT has two primary directional traffic flows. The airport operates in variations of this configuration approximately 58% of the time in Instrument weather conditions (totaling 5% annually).
- The new runway was certified for instrument approaches on February 11, 2010. The percentages cited above include hours prior to the opening of the new runway. For the period prior to opening, only Runways 36C and 36R were used for arrivals.
- Reduced separation (2.5 NM) between arrivals is authorized for instrument approaches to all runways at CLT.
- Peak departure capacity is estimated to increase as future improvements are implemented.